CONTRACTOR STATEMENT OF WORK

FOR

TACTICAL AIR CONTROL PARTY – MODERNIZATION (TACP-M)

VEHICULAR COMMUNICATIONS SYSTEM (VCS)

11 July 2008

REVISION SUMMARY

REVISION	CHANGE INFORMATION
-	INITIAL RELEASE
1	Revised in response to Government Evaluation Notices
2	Revised in response to Government Evaluation Notices

1 Scope (SOO 1.0)

This Contractor Statement of Work (CSOW) sets forth the efforts required to design, develop, fabricate, integrate, test, and produce the associated documentation, provide logistic support, technical support, field service support and training, and develop technical manuals in support of delivering the Tactical Air Control Party-Modernization. (TACP-M) Vehicular Communications System (VCS). The Contractor is responsible for providing all material, services, and necessary support documentation needed to complete the tasks identified in this CSOW, with the exception of Government Furnished Equipment (GFE).

The U.S. Air Force (USAF) requires the capabilities provided by the TACP community and their VCS components to support numerous critical functions across the battlespace. The VCS enables TACPs to advise the ground commander and staff on aerospace power capabilities and assist them in planning close air support (CAS) operations. TACPs provide USAF tactics, techniques, procedures expertise, and a focal point for detailed air CAS integration with ground force fire and maneuver. To perform their mission, TACPs must employ vehicle-mounted communications systems, manpack radios, and digital communications devices that enable them to be interoperable with the Army Digitized Battlefield.

1.1 Vehicular Communications System (VCS) Procurement Objective (SOO 1.1.1). The procurement objective is to replace the existing Radio Communication System AN/GRC-206(V)5/6 with a Vehicular Communications System. The VCS will become a system of the overall TACP-M Program and the key element in providing on-the-move (OTM) communication and data interoperability required to effectively operate throughout the battlespace. Using different communications systems at the various ground force echelons and between various aircraft and C2 nodes requires the VCS to be equipped with communications capabilities that support multiple waveforms.

1.2 Documentation Precedence (SOO 1.2). Where the technical requirements of the contract conflict with other Government documents, the VCS Technical Requirements Document (TRD) takes precedence.

2 Applicable Documents. The following documents are applicable to this Contractor Statement of Work:

Document Title	Document Number
Program Manager's Guide: A Modular Open Systems Approach (MOSA) To Acquisition, Version 2.0 September 2004	N/A
Reliability Prediction of Electronic Equipment	MIL-HDBK-217F, 28 Feb 1995
Reliability Test Methods, Plans, and Environments For Engineering Development, Qualification, and Production	MIL-HDBK-781A, 1 Apr 1996
DoD Standard Practice For Military Package	MIL-STD-2073-1D(1), 10 May 2002
Military Marking for Shipment and Storage	MIL-STD-129P(4), 19 Sep 2007
Document Title	**Document Number**
Identification Marking of U.S. Military Property	MIL-STD-130M, 15 Jun 2007
Requirements for the Control of Electromagnetic Interference Characteristics of Subsystems and Equipment	MIL-STD-461E, 20 Aug 1999
NSTISSAM Red/Black Installation Guidelines	NSTISSAM TEMPEST/2-95, 12 Dec 1995
Mobile Tactical Systems Overload Prevention Procedures	MIL-HDBK-910, 4 Mar 1998
Information Assurance (IA) Implementation	DoDI 8500.2, 6 Feb 2003
Department of Defense Information Assurance Certification and Accreditation Process (DIACAP)	DoDI 8510.01, 28 Nov 2007
Work Breakdown Structures For Defense Materiel Items	MIL-STD-881A, 30 July 2005
National Consensus Standard for Configuration Management	ANSI/GEIA EIA-649-A, 1 Feb 2006
Configuration Management Guidance	MIL-HDBK-61A, 7 Feb 2001
Software Life Cycle Processes	IEEE/EIA 12207
Air Force Technical Manual Contract Requirements (TMCR)	TM 86-01
Logistics Management Information	MIL-PRF-49506(1), 8 Jan 2005
Training Data Products	MIL-PRF-29612(B)(1), 8 June 2006
Instructional Systems Development/Systems Approach to Training and Education	MIL-HDBK 29612/2A(1), 8 June 2006
Development of Interactive Multimedia Instruction (IMI)	MIL-HDBK 29612/3A(1), 8 June 2006
Tactical Air Control Party-Modernization Vehicular Communications System Technical Requirements Document (TRD)	5 February 2008
Tactical Air Control Party-Modernization (TACP-M) Program Statement of Objectives (SOO) for the Vehicular Communications System (VCS)	6 February 2008
DISA System Technical Implementation Guides (STIGs)	http://iase.disa.mil/stigs/stig/index.html

3 TACP-M Vehicular Communications System (VCS)

3.1 TACP-M VCS Overview (SOO 3.1; 3.2). The Contractor shall design, fabricate, deliver, and install 10 VCSs to meet SOO and the VCS TRD requirements. The Contractor shall install four VCSs at the Contractor's facilities into Government furnished vehicles; the remaining six shall be installed into Government-provided vehicles at Fort Riley, KS, prior to the Operational Test.

The VCS system shall be mounted in and fully compatible with the three-person M998/M1098/M1145/M1165 HMMWV. The design must be based on a rack mounted, modular system that also supports the planned future VCS installation on the Stryker Light Armored Vehicle III, Bradley Fighting Vehicle (M2), and International Military and Government (IMG) Mine Resistant Ambush Protected (MRAP) Vehicles. Due to the inherent differences in the above referenced host vehicles, interior areas that are available for VCS installation as well as the differences in the exterior vehicle area available for antenna installation, reasonable allowances in VCS configuration differences (i.e., variants) will be supported. The Contractor will be responsible for the specific host platform vehicle configurations and shall maintain individual host vehicular platform configurations. The Contractor shall keep the number of VCS variants to a minimum to ensure the highest commonality.

The VCS shall use previously certified NSA radio systems and Commercial Off-The-Shelf (COTS)/Non-Development Items, and Government Off-The-Shelf (GOTS) components where and when cost-effective and practical. All cost analyses shall consider logistics support requirements.

3.1.1 Program Management (SOO 5.1). The Contractor shall manage program operations to include program execution and subcontractor management. The Contractor shall establish, maintain, or utilize their own proven program management practices to manage all technical performance, cost, schedule, and contract data delivery requirements throughout the period of performance. The Contractor's program management practices shall provide visibility into the Contractor's organization and techniques used in managing the program, specifically subcontractor and data management. Documentation shall be readily available to Government representative(s) during planned visits. The Contractor shall provide monthly Program Progress Reports.

CDRL: A012

3.1.1.1 Facilities/Infrastructure (SOO 1.4; 5.9). The Contractor shall provide facilities properly outfitted to perform the management, engineering, logistics, production and test services required by the VCS program safely and efficiently. The facility must meet the contract DD254 requirements, and the Contractor staff supporting the VCS solicitation/contract shall maintain a Secret-level security clearance as required.

The Contractor and the Government will use the Internet to pass programmatic data such as Contractor's performance, management, and schedule status, and progress data applicable to this contract reported in Microsoft Windows, Microsoft Excel, Microsoft Word, Microsoft Project, and Microsoft PowerPoint programs per the Contract Data Requirements List (CDRL) address and distribution list to the greatest extent possible. The Contractor shall access the TACP-M Program Management Communities of Practice (VCS CoP) Web site, via the Air Force Portal, to retrieve and post programmatic briefings and other pertinent information too large to pass via the Internet. The Government will sponsor the Contractor in obtaining access to the VCS CoP.

3.1.1.2 Management Controls (SOO 1.5; 5.1.1; 5.1.2; 5.1.3; 5.2; 5.3). The Contractor shall plan, organize, and manage all aspects of the VCS program – technical, schedule and cost performance, material procurement, data management, personnel, facilities, machinery, materials, test equipment, subcontractor, vendor services, and infrastructure resources. The Contractor shall maintain an ISO 9001-compliant quality control management system, and provide a risk management system to identify, manage, and report cost, schedule, and technical performance risk. All schedules (including the Integrated Master Schedule (IMS)) delivered to the Government will be delivered in Microsoft Project.

CDRL: A013, A028, A031

3.1.1.3 Conferences/Reviews (SOO 1.6; 1.6.1; 5.4; 5.5.3; 5.5.4; 5.5.7). The Contractor shall plan, host, attend, coordinate, support, and/or conduct all reviews. The reviews shall be conducted at Government or Contractor facilities. Reviews requiring equipment demonstration and/or examination shall be conducted at the Contractor's facility. The Contractor shall prepare agendas and conference presentation materials prior to each review, and provide minutes and reports following each review. Action item documentation and responsibility for completion and due dates shall be determined prior to all review adjournments. A summary of all action items, responsible parties, and estimated completion dates shall be included with the minutes.

The following conferences and reviews are required for this program:

- Post Award Conference (PAC)
- Systems Requirement Review (SRR)
- Preliminary Design Review (PDR)
- Human Systems Interface (HSI) Working Group
- Critical Design Review (CDR)
- Test Readiness Review(s) (TRR)
- Logistics Management Review(s) (LMR)
- Technical Orders Reviews and Verification
- Logistic Provisioning Conference(s)
- Engineering Drawing Reviews
- Quarterly Program Management Review(s) (PMR)
- Integrated Product Team(s) (IPT)
- In Process Review(s) (IPR)
- Physical Configuration Audit (PCA)
- Functional Configuration Audit (FCA)

The Contractor shall host a Post Award Conference (PAC) at the Contractor's facility within 30 days of Contract Award.

- The Contractor shall provide at least one representative to participate on the established Integrated Product Teams (IPTs). The Contractor shall assume travel for all meetings requiring on-site participation. The travel is defined as coast-to-coast. On-site meetings shall be defined as 2 days in length with travel days before and after the meeting days. The IPTs and their notional schedule include:
- PM IPT will meet approximately 1 hour telephonically on a weekly basis
- Integrated Test Team (ITT) will meet approximately 1 hour telephonically on a weekly basis and at a program office-directed location quarterly
- Logistics IPT will meet quarterly
- HSI Working Group will meet approximately 1 hour telephonically on a monthly basis

- Configuration Management IPT will meet approximately 1 hour telephonically on a monthly basis
- Close Air Support System Software (CASS) Integration Working Group, which meets approximately 1 hour telephonically weekly and face-to-face meetings quarterly
- Information Assurance (IA) Working Group which will meet quarterly or as required
- Training Working Group which meets approximately 1 hour telephonically weekly and at face-to-face quarterly

The Contractor shall host, support, and co-chair an In-Process Review (IPR) of the engineering drawings and associated lists and other documentation to be included in the Technical Data Package. The IPR may be scheduled when data has reached the 50 percent completion point. The IPR shall be held, when possible, in conjunction with other reviews (i.e., PDR, CDR). The Contractor shall notify the 584th Combat Sustainment Squadron (CBSS/GBHCC) that an IPR is scheduled to be conducted a minimum of 30 days prior to the IPR. The IPR shall focus on the Contractor's progress in the TDP preparation.

The Contractor shall conduct a Functional Configuration Audit (FCA) to validate the test/analysis data, and that the actual performance of the VCS complies with its TRD specification. The Government and the Contractor shall conduct the FCA at the Contractor's facility no later than 15 days after Contractor Test. The Government shall chair the audit.

The Contractor shall conduct a Physical Configuration Audit (PCA) to validate by formal examination of the actual VCS that it is adequately documented and the configuration complies with the TRD specification. The PCA will establish the product baseline. The PCA shall be conducted no later than 30 days prior to Milestone C. The Government and the Contractor shall conduct the PCA at the Contractor's facility. The Government shall chair the audit.

CDRL: A001, A002

3.1.1.4 Technical Library (SOO 2). The Contractor shall maintain a technical library composed of all program reference documentation.

3.1.1.5 Configuration Management (CM) (SOO 3.1; 5.5; 5.5.1; 5.5.2; 5.5.5; 5.8). The Contractor shall implement configuration and requirements management systems. The Contractor shall participate in VCS Configuration Review Board/Configuration Control Board meetings as requested by the

Government. At the Government's request the Contractor shall prepare and submit Engineering Change Proposals (ECPs) and Specification Change Notices (SCNs), as well as requests for Government approval for deviations/waivers to depart from any specification requirement.

The Contractor shall provide Requirements Management data to the Program Management Office that is compatible with the Dynamic Object Oriented Requirements System (DOORS). The Contractor shall provide a Software Version Description (SVD) for all the software that will be utilized in the VCS.

CDRL: A014, A015, A016, A019, A033

3.1.1.6 Management Plans (SOO 3.3; 5.7). The Contractor shall develop management plans for all program operations to include the program execution and subcontractor management to manage all technical performance, cost schedule, and contract data delivery requirements throughout the period of performance. The plans include, but are not limited to: Site Prep Requirements and Installation Plan, Program Management Plan (PMP), Software Development Plan, and Fielding Plan that supports the VCS production schedule.

CDRL: A018, A025

3.1.1.7 Subcontractor Management (SOO 5.5.8). The Contractor shall provide all subcontract oversight and management required for the completion of the VCS effort. The Contractor shall flow down all requirements of the prime contract to its subcontractors.

3.1.2 Design (SOO 5.1). The Contractor shall design and develop the VCS to meet the specifications and criteria of the TRD. The Contractor shall incorporate requirements analysis and management, design analysis, drawing development, configuration management, software development management, TEMPEST control programs, reliability and maintainability control, and safety planning into its design process.

3.1.2.1 System Requirements Review (SRR) (SOO 3.2; 4.1; 4.2.1; 4.3; 4.3.3; 4.4; 4.4.1; 4.7.3; 4.8; 5.5.2). The Contractor shall analyze requirements and determine the compliance of its design solution. The Contractor shall conduct an SRR. This review shall consist of detail design analysis of the VCS design. Design documentation shall include discussion of alternatives and the ramifications thereof, risk

assessments, and trade-offs made. Trade studies shall be performed for the multi-band radio, HF radio, antennas/RF equipment, mission computer, network router, network switch, and equipment rack design.

The Contractor shall analyze the components of the integrated system design. Analyses shall include: space analysis; weight and balance analysis; power system, heating and cooling analysis; LCCE, Modular Open Systems Approach (MOSA) analysis. The Contractor shall employ MOSA principles in its design solution for the VCS design extensibility analysis, co-site interference analysis, and human systems interface (HSI) analysis.

An HSI Working Group will be held 10 days after the Preliminary Design Review (PDR) and 45 days prior to the Critical Design Review (CDR) and shall be included in the Integrated Master Schedule.

The Contractor shall establish and maintain a Corrosion Control Program, Safety Program to include a System Safety Hazard Analysis Report (SSHA) certifying VCS is safe and ready for testing, TEMPEST Control Program, and a Security Certification and Accreditation Program to ensure compliance with all TRD requirements. The Contractor shall assist the Government in review of all DIACAP and Certificate of Networthiness documentation, with appropriate appendices, for Government Program Manager's review and ultimate Designated Accrediting Authority (DAA) approval.

CDRL A008, A011, A024, A029

3.1.2.2 Preliminary Design Review (PDR) (SOO 1.6). The Contractor shall develop the preliminary design to include the preparation, review, and publishing of the VCS System Architecture, Single Line Diagrams, Equipment Arrangements, Field Deployment Drawings, M1145 Power System Schematics, and the Master Equipment List as part of the PDR. The Contractor shall incorporate all design changes approved during the PDR.

3.1.2.3 Critical Design Review (CDR) (SOO 1.6). The Contractor shall develop the critical design. At the CDR, the Contractor shall formally report the results of the developmental tests, address design changes made during the fabrication process, and recommend design changes as a result of the developmental tests including trade-off impacts. The critical design shall include the preparation, updating, review, and publishing of the VCS System Architecture, Single Line Diagrams, Equipment Arrangements, Field Deployment Drawings, M1145 Power System Schematics, Master Equipment List, and system ICDs. The Contractor shall incorporate all design changes approved during the CDR.

3.1.2.4 Detailed Design (SOO 1.6). The Contractor shall develop the final prototype design baseline. The final prototype baseline shall include the preparation, updating review, and publishing of the VCS drawings, Master Equipment List, System Architecture, System ICDs, and any FCA/PCA Drawing changes.

3.1.2.5 Design Products (SOO 5.5.6; 5.6; 5.5.9). The Contractor shall develop a complete product drawing/Technical Data Package (TDP) and provide it to the Government. The product drawings shall include control drawings for all COTS items not conforming to recognized Government or industry specifications, non-developmental items (NDI), and items developed at private expense for which the Government had not acquired unlimited rights. The TDP shall provide the necessary design, engineering, manufacturing, testing, and quality assurance requirements information necessary to enable the procurement or manufacture of an interchangeable item that duplicates the physical and performance characteristics of the original product, without additional design engineering effort or recourse to the original design activity. The Contractor shall identify all software code and technical documentation data rights for which the Contractor and their subcontractor(s) retain ownership rights. The Contractor shall identify the software, hardware, and technical documentation data rights which the Government retains unlimited rights, or Government Purpose Rights due to Government-funded development.

The Contractor shall implement specific Unique Identification (UID) marking as defined in MIL-STD-130M Change 1, and DoD Standard Practice: Identification Marking of U.S. Military Property, 15 June 2007. The two-dimensional UID marking shall be incorporated into existing data plates, shall be machine-readable with common optical scanning devices, and be accompanied by the corresponding human readable markings when practical. All spare parts, secondary repairable, and consumables exceeding $5K when purchased separately will be marked with the UID prior to delivery to the Government.

CDRL: A017

3.1.2.6 Special Projects and Studies (SOO 5.10). The Contractor shall undertake special projects, studies, and support Advance Concept Technology Demonstration (ACTD) and exercise efforts that utilize and/or interface with the VCS as directed by the Government.

3.1.3 Material Acquisition. The Contractor shall provide all required hardware and software required to assemble, integrate, test, and deliver the VCS, as specified in the design documentation, Master Equipment List (MEL) and associated Bills of Materials (BOMs). The Contractor shall also procure necessary mounts, ancillaries, options, manuals, and warranties.

3.1.3.1 Receive GFE/GFI (SOO 1.3). The Contractor shall have DCMA-approved Government property management system to provide for proper GFE accountability, security, and storage. The Contractor shall notify the Government of any deficiencies in the GFI and GFE received.

3.1.3.2 Procure/Track/Receive/Handle Contractor Furnished Equipment. The Contractor shall have a DCMA-approved procurement system to research, procure, and expedite material buys. The Contractor shall meet weekly during the procurement period to coordinate status and actions associated with material procurement. The Contractor shall receive, inspect, and maintain logistics databases for managing all material inventories, warehousing and issue.

3.1.4 Build/Production (SOO 3.2)

3.1.4.1 Production Engineering (SOO 3.2). The Contractor shall develop and validate production work instructions, production processes, and work instructions. The Contractor shall develop the overall production planning for both the prototype installations and the production process. The Contractor shall conduct a producibility analysis of the design. The Contractor shall develop the site prep requirements and installation plan.

3.1.4.2 Cable Fabrication (SOO 3.2). The Contractor shall provide cable fabrication services necessary to assemble the VCS.

3.1.4.3 Panel Pre-Assembly (SOO 3.2). The Contractor shall provide VCS panel assembly services.

3.1.4.4 Integrate Racks (SOO 3.2). The Contractor shall prepare and mount assemblies and equipment into the VCS cabinet racks.

3.1.4.5 Vehicle Preparation (SOO 3.2; 3.3). The Contractor shall prepare the vehicles for system integration.

3.1.4.6 Vehicle Installation (SOO 3.2). The Contractor shall integrate all VCS equipment, shelving, racks, cables, antennas, and parts into the host vehicle.

3.1.4.7 Assemble Vehicle Kits (SOO 3.2). The Contractor shall install and checkout all VCS equipment into the first four GFE vehicles in the Contractor's facilities. The Contractor shall assemble and kit the A-Kit and B-Kit materials for all other vehicles for shipment to the installation sites as directed by the Government.

3.1.5 Test (SOO 4.3.2; 4.3.2.1; 4.3.2.2; 4.3.2.3). The Contractor shall test the entire VCS system to ensure compliance with the TRD. The VCS test plan includes Government-witnessed Contractor Testing (CT), Government Qualification Testing (QT) and Government Operational Testing (OT) to demonstrate compliance with the VCS TRD for hardware and software performance.

The Contractor shall develop a comprehensive test plan covering all phases of testing. The plan shall include test criteria, resources, data requirements, personnel requirements, and analyses methodology. The Contractor shall develop test plans and test procedures, test, support Government testing, and develop the production acceptance test procedures for the VCS in accordance with the TRD to verify that the design and integrated system fully complies with the requirements baseline.

3.1.5.1 Integration Testing (SOO 4.3.2.4; 4.8). The Contractor shall develop and perform all equipment bench (Stage II) testing, Subsystem (Stage IV) testing, System Level (Stage V) testing, and acceptance (Stage VII - Government Witnessed) testing. The Test results shall be documented in the Test/Inspection Report. The DD250 (Material Inspection and Receiving Report, August 2000 edition) for VCS will be signed only after the VCS has been properly installed, tested, and passed acceptance test in designated vehicles.

CDRL: A007

3.1.5.2 Performance Testing (SOO 4.3; 4.3.1.1; 4.3.1.2; 4.3.1.3; 4.3.2.1; 4.7.1; 4.7; 4.7.2; 4.7.3; 4.8). The Contractor shall ensure the VCS shall meet or exceed the VCS TRD performance requirements. Three of the initial 10 VCSs shall be subjected to qualification tests (QT) and 1 of the initial 10 shall be subject to environmental testing to verify VCS TRD compliance. The remaining 6 of the 10 initial VCSs shall be shipped to the Operational Test (OT) location, Ft Riley, KS, for vehicle installation and

performance of all acceptance tests and Quality Assurance inspections. VCS operator training shall be completed prior to the start of the OT.

The Contractor shall develop system test plans and test procedures to verify that the VCS meets or exceeds TRD requirements. The test plans and procedures shall address each test activity or event for the entire effort. Specific performance testing procedures shall include environmental stress screening (ESS), reliability, software stress, system environmental, electromagnetic compatibility, TEMPEST, system, system performance security certification and accreditation testing, as well as quality conformance inspections.

The Contractor shall provide a VCS that meets Mission Assurance Category (MAC) level II requirements as specified in the DoD I 8500.2 and DoDI 8510.01. Further, the VCS computer shall include configuration protections as specified by DISA System Technical Implementation Guides (STIGs) for its operating system.

The Contractor shall support the TACP Program Office to meet the Net-Ready Key Performance Parameter (NR-KPP) compliance statement by providing engineering/technical support and data/documentation. The Government is responsible for NR-KPP compliance.

CDRL: A005, A006, A009, A010

3.1.6 Deliver (SOO 4.5; 6.3.1). The Contractor shall ship the completed VCS as directed by the Government, complying with Air Force Materiel Command and Government standards for marking, packing, item preservation and packaging for all items, including items determined to be Electrostatic Discharge Equipment sensitive. The Contractor shall install, test, and provide both Operations and Maintenance on-site training immediately following the installation of VCS at each location. Both the Computer Based Training (CBT) and training curriculum shall be delivered with VCS installation at each unit.

3.1.6.1 CONUS Deliveries (SOO 3.3). The Contractor shall provide fielding teams to install VCS in Government-provided vehicles within the Continental United States (CONUS) at designated installations in accordance with the contract. The Contractor shall ship VCSs to CONUS installations by land, air, or combination thereof.

3.1.6.2 OCONUS Deliveries (SOO 3.3). The Contractor shall provide fielding teams to install VCS in Government-provided vehicles Outside CONUS (OCONUS) at designated installations in accordance with the contract. The Contractor shall ship the VCSs intended for OCONUS installation by land, air, or combination thereof to a gateway in the United States from which military transport will deliver to OCONUS locations.

3.1.7 Integrated Logistics Support (ILS) (SOO 6). The Contractor shall implement an ILS program to ensure that supportability design criteria and characteristics are considered and incorporated into the design, consistent with the trade-off studies conducted to meet the operational availability requirements of the VCS TRD. The Contractor shall provide management of all activities related to the product development identified in this section and participate in all Logistics Management Reviews (LMRs).

3.1.7.1 Reliability, Maintainability, Availability (RMA) (SOO 4.2). The Contractor shall prepare and implement a comprehensive RMA Program.

CDRL: A003, A004

3.1.7.2 Life Cycle Cost Estimate (LCCE) Analysis (SOO 4.6). The Contractor shall conduct a Life Cycle Cost Estimate Analysis utilizing the Cost Analysis Strategy Assessment (CASA) model. The Contractor's VCS design shall take into account overall life-cycle costs of 20 years.

3.1.7.3 Technical Manual (TM) Development (SOO 6.1). The Contractor shall develop VCS Technical Manuals in accordance with Air Force Technical Manual 86-01M, *Air Force Technical Manual Contract Requirements (TMCR)*, 1 August 2006. The Contractor shall provide COTS manual(s) for the VCS components, to include supplemental data as available. The manual(s) shall contain installation, operation, troubleshooting, and maintenance instructions. The Contractor shall provide change pages/modification instructions to the manuals resulting from approved changes to the baseline system. The Government requires notification of all changes and revisions to the manuals for the duration of this contract.

The Contractor shall be responsible for TM development planning and management. The Contractor shall conduct formal In-Process Reviews (IPRs) with Government representatives, and incorporate changes as identified and agreed upon during the review process. Formal IPRs to occur at the following

intervals: TM 30 percent, 60 percent, and 90 percent Draft Development. The Contractor shall incorporate all concurred comments into the final delivery version of the technical manual.

The Contractor shall provide COTS manual(s) for the VCS components, to include supplemental data as available. The manual(s) shall contain installation, operation, troubleshooting and maintenance instructions. The Contractor shall collect all Commercial Off-The-Shelf equipment manuals provided by the OEMs of the equipment incorporated into the TACP-M system. The Contractor shall maintain configuration management of COTS manual versions and provide a latest version list at time of TM delivery.

CDRL: A030

3.1.7.4 Training Development (SOO 6.3; 6.3.1; 6.3.2; 6.3.3). The Contractor shall develop and manage training. This shall include planning, coordination, on-site training course development, formal school course development, and unit-level CBT course development.

CDRL: A020, A021, A022, A023

3.1.7.5 Provisioning (SOO 6.2; 6.2.1; 6.2.2; 6.2.3). The Contractor shall develop Provisioning Technical Documentation (PTD) in accordance with a Performance Based Logistics concept and the Air Force Initial Provisioning Performance Specification (IPPS) identified in *Exhibit A pages 43 thru 49*, as submitted by the provisioning organization, the 584th CBSS/GBHBC. The Contractor shall identify and recommend logical spare/repair parts sufficient to meet system/equipment operation and supportability in accordance with the Air Force IPPS.

The following PTDs will be submitted - Provisioning Parts List (PPL), Design Change Notices (DCNs), Spares Acquisition Integrated with Production (SAIP), Long Lead Items List (LLIL), Supplemental Data for Provisioning (SDFP), Support Equipment Recommendation Data (SERD) List, and Standard Modified Hand Tools List. During the production phase of the contract the contractor shall provide spares, replaceable by unit personnel, for operations and maintenance. The equipment spares shall be as identified in the B Tables attached to the contract. The Government will conduct a provisioning conference to determine the items and quantity of items that will be acquired from the B Tables when the options for this requirement are exercised.

CDRL A026, A027, A032

3.1.8 Interim Contractor Support (SOO 6.3.4) The Contractor shall provide 3 years of interim Contractor support for fielded VCS to include replacing equipment and components and field support CONUS and OCONUS.

3.1.8.1 Help Desk (SOO 6.3.4.1). The Contractor shall provide Tier I and Tier II help desk support. Tier I support shall consist of 24/7 but not to exceed a 2-hour response time for technical assistance in support of the VCS, to include a toll-free worldwide phone number, e-mail support, and Web site support. The Help Desk phone number shall support at least five callers simultaneously. The Contractor shall record, track, and analyze support calls received to the Help Desk to support the Government's Operational Suitability and Effectiveness (OSS&E) program.

Tier II support shall consist of in-depth technical and engineering support to include on-site support to the warfighter, assuming one trip per month, 7-days duration, consisting of two subject matter experts to OCONUS/CONUS units.

CDRL: A012

3.1.8.2 Warranties (SOO 6.3.5). The Contractor shall allow for Original Equipment Manufacturer (OEM) warranties of all individual components to be retained after integration into the VCS. The Contractor shall act as a central point of management for warranties. In addition, the Contractor shall provide a 3-year warranty on all VCS parts and components (excluding GFE) that do not have OEM or OEM warranties of at least 3 years. The warranty shall guarantee that all non-radio parts and components meet the performance characteristics described in the SOO and TRD and be free from defects in material, workmanship, and delivered software for this 3-year period. Furthermore, the Contractor shall also provide warranties on all installed radios (excluding GFE) for a period of 10 years from the date of acceptance, and the warranty shall guarantee that the radios meet the performance characteristics described in the TRD and be free from defects in material, workmanship, and installed firmware/software for this 10-year period. The Contractor shall repair or replace any components delivered to VCS operational sites that fail during the warranty period. Correction of failures shall be accomplished within 30 calendar days after receipt of defective equipment.

3.1.9 Travel/Other Direct Costs (ODC). The Contractor shall account for all Travel and ODC CLIN costs including travel, shipping, and other direct cost associated with program execution during the contract year. Includes travel costs such as air transportation, car rental, hotel, M&IE. Other items include shipping charges to transport installation kits to the Government designated locations for system integration.